| Cubatituta | for form 1449A/PTO | | | Complete If Known | | |
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| | | | · · | Application Number | 10/625,189 | |
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| SIAI | EMENT B | | ANI | First Named Inventor | Junzhong Liang | |
| | (use as many she | ets as necessary) | | Group Art Unit | 3737 | |
| | · . | | | Examiner Name | John Sanders | |
| Sheet | Sheet 1 of 9 | | | Attorney Docket Number | 92050.DIV3 | |

| xaminer | Cite | U.S. Patent Document | Name of Patentee or Applicant | Date of Publication of | Pages, Columns, Lines, Where Relevant |
|-----------|------|----------------------|-------------------------------|------------------------------|--|
| Initials* | No. | Number (if known) | of Cited Document | Cited Document MM-DD-YYYY | Passages or Relevant Figures Appear |
| 941 | AA | 3,880,501 | Munnerlyn | Apr. 29, 1975 | |
| 0 | AB | 4,069,823 | Isakov et al | Jan. 24, 1978 | |
| | AC | 4,523,821 | Lang et al. | June 18, 1985 | |
| | AD | 4,579,430 | Bille | Apr. 1, 1986 | |
| | AE | 4,632,528 | Yoshino et al. | Dec. 30, 1986 | |
| | AF | 4,669,466 | L'Esperance | June 2, 1987 | |
| | AG | 4,688,941 | Philbert | Aug. 25, 1987 | |
| | AH | 4,702,245 | Schröder et al | Oct. 27, 1987 | |
| | AI | 4,718,418 | L'Esperance, Jr. | Jan. 12, 1988 | |
| | ΑJ | 4,721,379 | L'Esperance | Jan. 26, 1988 | |
| | AK | 4,729,372 | L'Esperance, Jr. | Mar. 8, 1988 | |
| | AL | 4,750,818 | Cochran | Jun. 14, 1988 | |
| | AM | 4,764,930 | Bille et al | Aug. 16, 1988 | |
| | AN | 4,838,679 | Bille | June 13, 1989 | |
| | AO | 4,848,340 | Bille et al | Jul. 18, 1989 | |
| | AP | 4,881,808 | Bille et al | Nov. 21, 1989 | , |
| | AQ | 4,901,718 | Bille et al | Feb. 20, 1990 | |
| | AR | 4,907,586 | Bille et al | Mar. 13, 1990 | |
| | AS | 4,941,093 | Marshall et al | Jul. 10, 1990 | |
| | AT | 4,972,836 | Schenck et al | Nov. 27, 1990 | |
| | AU | 4,988,348 | Bille | Jan. 29, 1991 | |
| | AV | 4,991,953 | Pflibsen et al. | Feb. 12, 1991 | |
| | AW | 5,026,977 | Hubbard, Jr. | Jun. 25, 1991 | |
| | AX | 5,062,702 | Bille | Nov. 5, 1991 | |
| | ΑY | 5,106,183 | Yoder, Jr. | Apr. 21, 1992 | |
| 940 | ΑZ | 5,114,628 | Höfer et al. | May 19, 1992 | |

Examiner Signature Date Considered 5/25/2005

*EXAMINER: Initial/inference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

| Cubatha | e for form 1449A/PTO | | | Complete If Known | | |
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| | - | | | Application Number | 10/625,189 | |
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| Sheet | 2 | of | 9 | Attorney Docket Number | 92050.DIV3 | |

| xaminer | Cite | U.S. Patent Document | Name of Patentee or Applicant | Date of Publication of Cited Document | Pages, Columns, Lines, Where Relevant |
|-----------|------|----------------------------|-------------------------------|--|--|
| Initials* | No. | Kind Co Number (if know | | MM-DD-YYYY | Passages or Relevant Figures Appear |
| RX | BA | 5,139,022 | Lempert | Aug. 18, 1992 | |
| | BB | 5,147,352 | Azema et al | Sep. 15, 1992 | |
| | BC | 5,159,361 | Cambier et al. | Oct. 27, 1992 | |
| | BD | 5,177,511 | Feuerstein et al. | Jan. 5, 1993 | |
| | BE | 5,184,157 | Ichihashi et al. | Feb. 2, 1993 | |
| | BF | 5,196,006 | Klopotek et al | Mar. 23, 1993 | |
| | BG | 5,198,845 | Triller | Mar. 30, 1993 | |
| | вн | 5,202,709 | Ischihashi et al. | Apr. 13, 1993 | |
| | BI | 5,214,456 | Gersten | May 25, 1993 | |
| | BJ | 5,221,834 | Lisson et al | Jun. 22, 1993 | |
| | BK | 5,229,889 | Kittell | July 20, 1993 | |
| | BL | 5,233,174 | Zmek | Aug. 3, 1993 | |
| | ВМ | 5,243,367 | Spellitz | Sept. 7, 1993 | |
| | BN | 5,246,435 | Bille et al | Sep. 21, 1993 | |
| | ВО | 5,258,791 | Penney et al | Nov. 2, 1993 | · |
| | BP | 5,263,950 | L'Esperance, Jr. | Nov. 23, 1993 | |
| | BQ | 5,279,611 | McDonnell et al | Jan. 18, 1994 | |
| | BR | 5,293,871 | Reinstein et al. | Mar. 15, 1994 | |
| | BS | 5,298,971 | Huang et al | Mar. 29, 1994 | |
| | BT | 5,307,097 | Baker | Apr. 26, 1994 | |
| | BU | 5,324,281 | Muller | Jun. 28, 1994 | |
| | BV | 5,334,190 | Seiler | Aug. 2, 1994 | |
| | BW | 5,339,121 | Shimmick et al | Aug. 16, 1994 | |
| | вх | 5,360,424 | Klopotek | Nov. 1, 1994 | |
| | BY | 5,395,356 | King et al | Mar. 7, 1995 | |
| gris | BZ | 5,404,884 | Lempert | Apr. 11, 1995 | |

Examiner Signature Date Considered 5/25/2005

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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| Cubatibuta | for form 1440A/DTO | | | Complete If Known | | |
|-------------------------------|--------------------|-------------------|-----|------------------------|----------------|--|
| Substitute for form 1449A/PTO | | | | Application Number | 10/625,189 | |
| | RMATION | | | Filing Date | 7/23/2003 | |
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| | | | | Examiner Name | | |
| Sheet | 3 | of | 9 | Attorney Docket Number | 92050.DIV3 | |

| xaminer | Cite | U.S. Patent D | | Name of Patentee or Applicant | Date of Publication of Cited Document | Pages, Columns, Lines, Where Relevant |
|-----------|------|---------------|-------------------------|-------------------------------|--|--|
| Initials* | No. | Number | Kind Code (if known) | of Cited Document | MM-DD-YYYY | Passages or Relevant Figures Appear |
| 938 | CA | 5,410,376 | | Cornsweet et al | Apr. 25, 1995 | · · · · · · · · · · · · · · · · · · · |
| 0 | СВ | 5,411,501 | | Klopotek | May 2, 1995 | |
| | CC | 5,423,801 | | Marshall et al | Jun. 13, 1995 | |
| | CD | 5,437,658 | | Muller et al | Aug. 1, 1995 | |
| | CE | 5,439,462 | | Bille et al | Aug. 8, 1995 | |
| | CF | 5,442,412 | | Frey et al. | Aug. 15, 1995 | |
| | CG | 5,452,031 | | Ducharme | Sept. 19, 1995 | |
| | СН | 5,461,212 | | Seiler et al | Oct. 24, 1995 | |
| | CI | 5,473,392 | | Klopotek | Dec. 5, 1995 | |
| | CJ | 5,474,548 | | Knopp et al | Dec. 12, 1995 | |
| | CK | 5,475,452 | | Kuhn et al. | Dec. 12, 1995 | |
| | CL | 5,491,524 | | Hellmuth et al. | Feb. 13, 1996 | |
| | СМ | 5,493,391 | | Neal et al. | Feb. 20, 1996 | • |
| | CN | 5,502,518 | | Lieberman | Mar. 26, 1996 | |
| | СО | 5,505,723 | | Muller | Apr. 9, 1996 | |
| | СР | 5,507,741 | | L'Esperance, Jr. | Apr. 16, 1996 | |
| | CQ | 5,512,965 | | Snook | Apr. 30, 1996 | |
| | CR | 5,512,966 | | Snook | April 30, 1996 | |
| | CS | 5,521,657 | | Klopotek | May 28, 1996 | |
| | СT | 5,548,354 | | Kasahara et al. | Aug. 20, 1996 | |
| | CU | 5,556,395 | | Shimmick et al | Sep. 17, 1996 | |
| | CV | 5,563,709 | | Poultney | Oct. 8, 1996 | |
| | CW | 5,570,142 | | Lieberman | Oct. 29, 1996 | |
| | CX | 5,581,347 | | Le Saux et al. | Dec. 3, 1996 | |
| | CY | 5,592,246 | | Kuhn et al. | Jan. 7, 1997 | |
| 9710 | CZ | 5,629,765 | | Schmutz | May 13, 1997 | |

Examiner Signature Date Considered 5/25/2005

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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| Cubetituta | for form 1449A/PT(| | | Complete If Known | | |
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| STATEMENT BY APPLICANT | | | | First Named Inventor | Junzhong Liang | |
| | (use as many sh | eets as necessary) | | Group Art Unit | 3737 | |
| | | | | Examiner Name | | |
| Sheet | 4 | of | 9 | Attorney Docket Number | 92050.DIV3 | |

| Examiner Initials* | Cite No. | U.S. Patent Document Kind C Number (if kno | ode Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|-----------------------|-------------|--|---|--|--|
| 930 | DA | 5,632,282 | Hay et al | May 27, 1997 | |
| | DB | 5,632,742 | Frey et al. | May 27, 1997 | |
| | DC | 5,673,096 | Dorsel et al. | Sep. 30, 1997 | |
| | DD | 5,684,545 | Dou et al | Nov. 4, 1997 | |
| | DE | 5,711,762 | Trokel | Jan. 27, 1998 | |
| | DF | 5,722,427 | Wakil et al. | Mar. 3, 1998 | |
| | DG | 5,735,283 | Snook | Apr. 7, 1998 | |
| | DH | 5,735,843 | Trokel | Apr. 7, 1998 | |
| | DI | 5,740,803 | Gray et al. | Apr. 21, 1998 | |
| | DJ | 5,757,463 | Kohayakawa | May 26, 1998 | |
| | DK | 5,777,719 | Williams et al. | July 7, 1998 | |
| | DL | 5,784,146 | Nanjo et al. | July 21, 1998 | |
| | DM | 5,785,704 | Bille et al. | July 28, 1998 | |
| | DN | 5,822,035 | Bille | Oct. 13, 1998 | |
| | DO | 5,825,476 | Abitol et al. | Oct. 20, 1998 | |
| | DO | 5,841,511 | D'Souza et al. | Nov. 24, 1998 | |
| | DQ | 5,847,804 | Sarver et al. | Dec. 8, 1998 | _ |
| | DR | 5,861,955 | Gordon | Jan. 19, 1999 | |
| | DS | 5,864,381 | Neal et al. | Jan. 26, 1999 | |
| | DT | 5,920,373 | Bille | July 6, 1999 | |
| | DU | 5,936,720 | Neal et al. | Aug. 10, 1999 | |
| | DV | 5,943,117 | Van De Velde | 12/99 | |
| | DW | 5,949,521 | Williams et al. | Sept. 7, 1999 | |
| | DX | 5,963,300 | Horwitz | Oct. 5, 1999 | |
| 1 | DY | 5,966,197 | Yee | Oct. 12, 1999 | |
| 9218 | DZ | 5,994,687 | Chanteloup et al. | Nov. 30, 1999 | |

Examiner Signature Date Considered 5/25/2005

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁴ Applicant is to place a check mark here if English language Translation is attached.

| Substituto (| for form 1449A/PTO | | | Complete If Known | | |
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| | | • | | Application Number | 10/625,189 | |
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| SIAI | | | ANI | First Named Inventor | Junzhong Liang | |
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| | | | | Examiner Name | | |
| Sheet 5 of 9 | | | | Attorney Docket Number | 92050.DIV3 | |

| Examiner | Cite | Cite U.S. Patent Docum | | Name of Patentee or Applicant | Date of Publication of | Pages, Columns, Lines, Where Relevant |
|-----------|------|------------------------|-------------------------|-------------------------------|---------------------------|--|
| lnitials* | No. | Number | Kind Code (if known) | of Cited Document | Cited Document MM-DD-YYYY | |
| 910 | EA | 6,007,204 | | Fahrenkrug et al. | Dec. 28, 1999 | |
| 0 | EB | 6,043,885 | | Mazuet et al. | Mar. 28, 2000 | |
| | EC | 6,050,687 | | Bille et al. | Apr. 18, 2000 | |
| | ED | 6,057,913 | | Brown et al. | May 02, 2000 | |
| | EE | 6,086,204 | | Magnante | Jul. 11, 2000 | |
| | EF | 6,095,651 | | Williams et al. | Aug. 1, 2000 | |
| | EG | 6,155,684 | | Bille et al. | Dec. 05, 2000 | |
| 940 | EG2 | 6,270,221 | | Liang et al. | Aug. 07, 2001 | |

| | | | F | OREIG | N PATENT DOCUMEN | TS | | |
|-----------------------|-------------|--------|--------------------------------|-------------------------|---|--|--|---|
| Examiner Initials* | Cite No. | Office | Foreign Patent Document Number | Kind Code (If known) | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | Т |
| 95 | EH | PCT | WO 87/05205 | | G. Rodenstock Instrumente Gmbh | Sept. 11, 1987 | | |
| | EI | PCT | WO 87/06478 | | Institut National De La Sante Et De La Recherche Medicale | Nov. 5, 1987 | | |
| | EJ | PCT | WO 92/01417 | | Horwitz, Larry S. | Feb. 6, 1992 | | |
| | EK | JP | 5-146409 | | Topcon Corp. | June 15, 1993 | | Т |
| | EL | JP | 6-327634 | | Topcon Corp. | Nov. 29, 1994 | | Т |
| | ЕМ | wo | 95/28989 | | Autonomous Technologies Corp. | Nov. 2, 1995 | | |
| | EN | EP | 0 697 611 | A3 | Carl Zeiss | Feb. 21, 1996 | | Т |
| | EO | EP | 0 697 611 | A2 | Carl Zeiss | Feb. 21, 1996 | | Т |
| | EP | DE | 42 22 395 | Al | Meyer-Roedern | Jan. 13, 1994 | | |
| | EQ1 | РСТ | WO 98/27863 | | University of Rochester | July 2, 1998 | | Т |
| 948 | EQ2 | DE | 199 26 476 | Al | Wavelight Laser Technologie GmbH | Dec. 14, 2000 | | T |

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PTO/SB/08A (10-96)
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| Substitute | for form 1449A/PTO | | | Complete If Known | | |
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| INFORMATION DISCLOSURE STATEMENT BY APPLICANT | | | | Application Number | 10/625,189 | |
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| | | | | Group Art Unit | 3737 | |
| | | | | Examiner Name | | |
| Sheet | 6 | of | 9 | Attorney Docket Number | 92050.DIV3 | |

| | | OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS | |
|----------------------|-------------|--|----|
| Examiner Initials | Cite No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or county where published. | T² |
| 92/8 | ER | PULIANTO, et al., "High-Speed Photography of Excimer Laser Ablation of the Cornea," Arch Ophithalmol, Vol. 105, Sept. 1987, pages 1255-1259. | |
| | ES | LIANG, et al., "Objective Measurement of Wave Aberrations of the Human Eye with the Use of a Hartmann-Shack Wave-front Sensor," J. Opt. Soc. Am. A, Vol. 11, No. 7, July 1994, pages 1949-1957. | |
| | ЕТ | WU, "Supernormal Vision, a Focus on Adaptive Optics Improves Images of the Eye and Boosts Vision," Science News, Vol. 152, November 15, 1997, pages 312-313. | |
| | EU | DREHER, et al., "Active Optical Depth Resolution Improvement of the Laser Tomographic Scanner," Applied Optics, Vol. 28, No. 4, February 1989, pages 804-808. | |
| | EV | GEARY, "Appendix 1.1 - Basic Geometrical Optics, Chapter 6 - Indirect Wavefront Measurement, Part II," and "Chapter 7 - Wavefront Sensor Characterization & Calibration," Introduction to Wavefront Sensors, May 1995, pages 10-11, 89-103, and 105-109. | |
| | EW | "Scientists Snap Sharpest Pictures of Living Human Retina," http://www.rochester.edu/pr/releases/opt/will.htm , October 3, 1994. | |
| | EX | THE APPLIED OPTICS GROUP, "Shack Hartmann Sensors," http://op.ph.ic.ac.uk/ao/sh_sense.html , June 4, 1996, pages 1-3. | |
| | EY | THE APPLIED OPTICS GROUP, "Results from UKIRT," http://op.ph.ic.ac.uk/ao/ukirt_res.html , February 22, 1995, pages 1-2. | |
| | EZ | THE APPLIED OPTICS GROUP, "Astronomical Imaging Through Turbulence: An Overview," http://op.ph.ic.ac.uk/ao/overview.html , June 4, 1996, pages 1-4. | |
| | FA | .eESA, WFS, "Wave Front Sensor," http://esapub.esrin.esa.it/pointtotest/test251.html , May 23, 1997, pages 1-2. | |
| | FB | WILLIAMS, "Limits of Human Vision," http://www.cvs.rochester.edu/people/d_williams/d_williams.html , December 30, 1998, pages 1-4. | |
| 980 | FC | "Extensions of Low-Cost Adaptive Optics: Imaging of Space-Objects, the Retina, and Power Projection," Industrial Sensors and Actuators, dated Dec. 1993 (actual publication date, if any, unknown), pp. 1, 10, and 15. | |

| Signature Som Volunders Considered \$ 123 / 2005 |
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^{*}EXAMINER: Initial it reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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| Substitute | for form 1449A/PTO | | | Complete If Known | | |
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| INFORMATION DISCLOSURE | | | | Application Number | 10/625,189 | |
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| STATEMENT BY APPLICANT | | | ANI | First Named Inventor | Junzhong Liang | |
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| | | | | Examiner Name | | |
| Sheet | 7 | of | 9 | Attorney Docket Number | 92050.DIV3 | |

| | | OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS | |
|----------------------|-------------|--|----------------|
| Examiner Initials | Cite No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or county where published. | T ₃ |
| 811 | FD | LABJUHN, et al., "Astigmatismuskorrektur durch Laserthermokeratoplastik (LTK) - Ein Ansatz für die Korrektur des hohen Astigmatismus nach Perforierender Keratoplastik, Contactologia 18D (1996), pp. 175-183. | |
| | FE | COHEN, et al., "Assessment of the Power and Height of Radial Aspheres Reported by a Computer-assisted Keratoscope," <i>American Journal of Ophthalmology</i> , Vol. 119, Vol. No. 6, Nov. 30, 1994, pp. 723-732. | |
| | FF | CORBETT, et al., "The Topography of the Normal Cornea," Eur J Implant Ref Surg., Vol. 6, Oct., 1994, pp. 286-297. | |
| | FG | MAEDER, et al., "Accurate 3D Corneal Surface Measurement Using an Automated Mapping Approach," SPIE, Vol. 2434, 1995, pp. 328-334. | , |
| | FH | SALMON, et al., "Comparison of Elevation, Curvature, and Power Descriptors for Comeal Topographic Mapping," Optometry & Vision Science, Vol. 72, No. 11, 1195, pp. 800-808. | |
| | FI | PAVLOPOULOS, et al, "The Effect of Artificial Tears on Computer-assisted Corneal Topography in Normal Eyes and After Penetrating Keratoplasty," <i>American Journal of Ophthalmology</i> , Vol. 119, June 1995, pp. 712-722. | |
| | FJ | ROBERTS, "Characterization of the Inherent Error in a Spherically-Biased Comeal Topography System in Mapping a Radially Aspheric Surface," <i>Journal of Refractive & Corneal Surgery</i> , Vol. 10, March/April 1994, pp. 103-111. | |
| | FK | THORNTON, "Clinical Evaluation of Comeal Topography," J. Cataract Refract. Surg., Vol. 19, Supplement 1993, pp. 198-202. | |
| | FL | RABINOWITZ, et al., "Computer-assisted Corneal Topography in Keratoconus," Refractive & Corneal Surgery, Vol. 5, Nov./Dec. 1989, pp. 400-408. | |
| | FM | WILSON, et al., "Accuracy and Precision of the Corneal Analysis System and the Topographic Modeling System," Cornea, Vol. 11, No. 1, 1992, pp. 28-35. | |
| | FN | BOGAN, et al., "Computer-assisted Videokeratography of Comeal Topography After Radial Keratotomy, Arch. Ophthalmol., Vol. 109, June 1991, pp. 834-841. | |
| 977 | FO | BOGAN, et al., "Classification of Normal Corneal Topography Based on Computer-assisted Videokeratography," Arch. Ophthalmol., Vol. 108, July 1990, pp. 945-949. | |

| | | | | |
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| Examiner Signature | John Nandero | Date Considered | 5/25 | /2005 |

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| | | | | Filing Date | 7/23/2003 | |
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| | | | | Group Art Unit | 3737 | |
| | | | Examiner Name | | | |
| Sheet | 8 | of | 9 | Attorney Docket Number | 92050.DIV3 | |

| | | OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS | |
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| Examiner Initials | Cite No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or county where published. | T² |
| 92/8 | FP | REIDY, et al., "The Corneal Topography of Epikeratophakia," Refractive & Corneal Surgery, Vol. 6, Jan./Feb. 1990, pp. 26-31. | |
| | FQ | DINGELDEIN, et al., "The Topography of Normal Comeas," Arch. Ophthalmol, Vol. 107, April 1989, pp. 512-518. | |
| | FR | McDONNELL, et al., "Topographic Analysis and Visual Acuity After Radial Keratotomy," American Journal of Ophthalmology, Vol. 106, No. 6, December 1988, pp. 692-695. | |
| | FS | McDONNELL, et al., "Corneal Topographic Changes After Radial Keratotomy," Ophthalmology, Vol. 96, No. 1, January 1989, pp. 45-49. | |
| | FT | KIELY, et al., "The Mean Shape of the Human Cornea," Optica Acta, Vol. 29, No. 8, 1982, pp. 1027-1040. | |
| | FU | BAFNA, et al., "Comeal Power Calculated by the Paraxial Formula and Snell's Law in Normal Comeas," Investigative Ophthalmology & Visual Science, Vol. 37, No. 3, February 1996, Poster No. 2589. | |
| | FV | MATALLANA, et al, "3-D Video Corneal Topography True Elevation Mapping," Investigative Ophthalmology & Visual Science, Vol. 37, No. 3, February 1996, Poster No. 2590. | |
| | FW | AOYAMA, et al, "Quantitative Evaluation of Corneal Astigmatism Using Computer Corneal Topography and Newly Developed Software," <i>Investigative Ophthalmology & Visual Science</i> , Vol. 37, No. 3, February 1996, Poster No. 2591. | |
| | FX | CELIKKOL, et al, "Neural Network Analysis of Videokeratography Following Excimer Laser Photorefractive Keratectomy," <i>Investigative Ophthalmology & Visual Science</i> , Vol. 37, No. 3, February 1996, Poster No. 2592. | |
| | FY | WALSH, et al., "Objective Technique for the Determination of Monochromatic Aberrations of the Human Eye," J. Opt. Soc. Am. A, Vol. 1, No. 9, Sept. 1984, pp. 987-992. | |
| Jus | FZ | WILLIAMS, et al., "Adaptive Optics for High Resolution Retinal Imaging," Investigative Ophthalmology & Visual Science, Vol. 37, No. 3, February 1996, p. 1055. | |

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| SIAI | (use as many sheets as necessary) | | | First Named Inventor | Junzhong Liang | |
| | | | | Group Art Unit | 3737 | |
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| 978 | GA | CHARMAN, "Wavefront Aberration of the Eye: A Review," Optometry and Vision Science, Vol. 68, No. 8, pp. 574-583. | |
| | GB | BARTSCH, et al., "Resolution Improvement in Confocal Scanning Laser Tomography of the Human Fundus," 1994 Technical Digest Series, Vol. 2 (Optical Society of America, Washington D. C.), 1994, pp. 134-137. | |
| | GC | DREHER, et al., "Active Optical Depth Resolution Improvement of the Laser Tomographic Scanner," Applied Optics, Vol. 28, No. 4, Feb. 1989, pp. 804-808. | |
| | GD | BILLE, et al., "Scanning Laser Tomography of the Living Human Eye," Noninvasive Diagnostic Techniques in Ophthalmology, Chapter 28, edited by Masters, B.R., Springer-Verlag, 1990, pp. 528-547. | |
| | GE | LIANG, JUNZHONG, A New Method to Precisely Measure the Wave Aberrations of the Human Eye with a Hartmann-Shack Wavefront Sensor, Inaugural Dissertation, December 1991, pages 1-115, Heidelberg, Germany. | |
| | GF | BILLE, et al., "Imaging of the Retina by Scanning Laser Tomography," New Methods in Microscopy and Low Light Imaging, Vol. 1161, 1989, pages 417-425. | |
| | GG | CUBALCHINI, "Modal Wave-front Estimation from Phase Derivative Measurements," J. Opt. Soc. Am., Vol. 69, 1979, pages 972-977. | |
| | GH | "Modal Wave-front Estimation from Phase Derivative Measurements," Referenced in Bille, U.S. Patent No. 5,062,702 IDS, 1990. | |
| | GI | FREISCHLAD, et al., "Modal Estimation of a Wave Front from Difference Measurements Using the Discrete Fourier Transform," J. Opt. Soc. Am., Vol. 3, No. 11, November 1986, pages 1852-1861. | |
| | GJ | KLYCE, et al., "Imaging, Reconstruction, and Display of Corneal Topography," New Methods in Microscopy and Low Light Imaging, Vol. 1161, 1989, pages 409-416. | |
| | GK | BAKER, "Optical Surface Testing of the Cornea," New Methods in Microscopy and Low Light Imaging, Vol. 1161, 1989, pages 427-437. | |
| No | GL | SOUTHWELL, "Wave-front Estimation from Wave-front Slope Measurements," J. Opt. Soc. Am., Vol. 70, No. 8, August 1980, pages 998-1005. | |

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| Examiner Signature | John Blanders | Date Considered | 5/25/2005 |

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